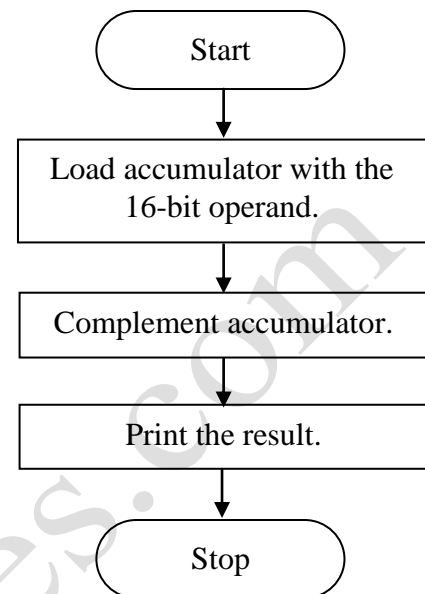


**Program 6:** 1's complement of a 16-bit number.**Program:**

Instructions	Comments
include "emu8086.inc"	
ORG 100h	
MOV AX, 0005H	Move 16-bit data to AX.
NOT AX	Complement AX.
CALL PRINT_NUM	Print the result.
RET	Return.
DEFINE_PRINT_NUM	Declare function.
END	

**Flowchart:****Explanation:**

- This program finds the 1's complement of a 16-bit number.
- The program has been developed using *emu8086* emulator available at: [www.emu8086.com](http://www.emu8086.com).
- ORG 100h is a compiler directive. It tells compiler how to handle the source code.
- It tells compiler that the executable file will be loaded at the offset of 100h (256 bytes).
- The 16-bit operand 0005H is moved to accumulator AX.
- Then, it is complemented by using NOT instruction.
- The result is printed on the screen.

**Output:****Before Execution:**

AX = 0005H

**After Execution:**

AX = FFFAH